APPLICATION FOR USE OF LIVE VERTEBRATE ANIMALS

In accordance with federal and University regulations, all research or instructional use of live, vertebrate animals, regardless of source of funding or location of animals, conducted by University faculty, staff and/or students must be reviewed and approved by the Institutional Animal Care and Use Committee (IACUC). THIS APPROVAL MUST BE OBTAINED PRIOR TO INITIATION OF THE RESEARCH OR INSTRUCTIONAL ACTIVITY. All individuals involved in the use of vertebrate animals in research or teaching are required by federal mandate to participate in a university sponsored training session, the purpose of which is to cover general principles of ethical care and use of animals in research, training, and testing. Details on the University's animal usage policies and training requirements can be obtained from the Office of Sponsored Programs.

Application Instructions

Complete the application and submit it along with the required documentation to the IACUC Chair through the DSU Office of Sponsored Programs. Required documentation will vary from application to application depending on the level of pain that the animal will experience. There are four recognized pain categories only one of which will be appropriate for your application.

B	C	D	E
Non-research Animals	**No Pain**	**Alleviated Pain**	**Unalleviated Pain**
Animals being bred, conditioned, or held for use in teaching, testing, experiments, research, or surgery, but not yet used for such purposes.	Procedures involving no pain or distress, or requiring no use of pain-relieving drugs.	Procedures involving pain or distress for which appropriate anesthetic, analgesic, or tranquilizing drugs will be administered; in addition, any terminal surgical procedures in which the animals are euthanized before recovering from anesthesia.	Procedures involving pain or distress but for which appropriate anesthetic, analgesic, or tranquilizing drugs will not be administered because to do so would affect the procedures, results, or interpretation of the results.

Required Documentation

In addition to your grant proposal describing your proposed methodologies, please also submit the following sections of the IACUC Application.

	Required IACUC Application Sections		
Category	**Cover Page (pg. 1)**	**SOPs (pg. 3)**	**Appendix D**
B	yes	yes	no
C	yes	yes	no
D	yes	yes	yes
E	yes	yes	yes

Please Note:

1. Applications that are not signed by both the PI and the respective Department Chair will be returned without further review.
2. All applications must also include a copy of your CITI training certificate.
3. If you are applying for extramural funding, it is best to submit the IACUC application at the same time as the grant application to avoid delays in getting your funds released.

For more information or if you have questions about completing your application, please do not hesitate to contact Dr. Dennis McIntosh, IACUC Chair at 302-857-6456 or dmcintosh@desu.edu.

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Cover Page

Title of project/proposal:

1. Is the project/proposal new ☐ or a renewal / revision ☐ ?
If a renewal / revision, please give the identifying protocol number:

2. Project is used for research: ☐ teaching: ☐ or both: ☐

3. Name of the Delaware State University principal investigator:
Title and rank (if different):

Yes ☐ No ☐

5. College and department (if different):

6. Phone: 7. Fax:

8. Email:

9. This project either has been or will be submitted to the following agenc(ies) for funding. Also, provide the submission date, if already submitted, or the deadline for submission. (Please spell out acronyms):

10. Other sources of funding (Please spell out acronyms):

11. Please identify other staff or collaborators involved with the project, and their institutional affiliation (whether on or off campus). If no other personnel are involved, write "N/A".

Name	Institution and Location

12. Check the appropriate pain category. Refer to instruction sheet for details.

_____ Category B.
_____ Category C.
_____ Category D.
_____ Category E.

13. Hazardous / Controlled Substances: Will animals be intentionally exposed to any of the following materials? (If yes, specify the compound or organism.) _____ Yes ____ No

Radioisotopes	
Chemical Hazards	
Biohazards	
Carcinogens	
Recombinant DNA	
Other (specify)	

Assurances

By signing the application, I hereby certify that the foregoing information is complete and correct and that professionally acceptable ethical and humane standards governing the care, treatment, and use of animals will be followed.

- I assure that discomfort and injury to animals will be limited to that which is unavoidable in the conduct of scientifically valuable research, and that appropriate anesthetic, analgesic and tranquilizing drugs will be used to relieve all unnecessary pain and distress for the subject animals during teaching, research, testing, and/or post-operative care.
- I assure that animals that would otherwise experience severe or chronic pain, or distress that cannot be relieved will be painlessly euthanized at the end of the procedure, or if appropriate, during the procedure.
- I agree to cooperate with the Institutional Animal Care and Use Committee and the Office of Sponsored Programs in their supervision of these laws and policies. I am aware of the professional standards of competence and responsibility pertaining to the use of laboratory animals.
- I am ultimately responsible for the training and conduct of students, or any other staff under my supervision in regards to animal care and welfare.
- *I have implemented a literature search using at least two (2) databases and attest that the project does not unnecessarily duplicate previous experiments and that the use of animals is necessary to complete the objectives.*

Databases Used: (ex. MEDLINE, etc.)		
Relevant citations (if applicable):		

Name of Principal Investigator (typed) _____

Signature of Principal Investigator: _____ Date: _____

This application has been reviewed by the DSU IACUC and has been approved.

Name of IACUC Chair (typed) _____

Signature of IACUC Chair _____ Date: _____

APPLICATION FOR USE OF LIVE VERTEBRATE ANIMALS

Standard Operating Procedures (SOP) Sheet

1. Species to be investigated / used: _____
(Please use a separate SOP form for each vertebrate species used. List scientific names in parentheses)

2. Maximum number of animals to be utilized during study:	
Number of replicate animals per treatment group:	

3. Source of animals (Company or private vendor, and contact information):
Note: If the animals will be captured from the wild, state "wild capture" and answer question 3a.

3a. If animals will be captured from the wild, answer the following questions.

Type of traps	
Frequency of trap checking	
Size of cage for transport (if needed)	
Site of capture / release	

4. Will the animals be housed for longer than 12 hours at Delaware State University? ___ Yes ___ No
If yes, state all locations where they are to be kept or to which they are to be moved (building or farm):

5. Will animals be confined in manufactured cages? _____ Yes _____ No
If yes, state the size of the cages (square feet or meter of floor space), and the number of animals per cage:

6. Will the animals be confined in an enclosure, such as fenced land or a pond? _____ Yes _____ No
If yes, state the size of the enclosure or pond, and the number of animals residing.

7a. Will the animals be fed and watered *ad libitum*? _____ Yes _____ No
If no, state the planned feeding regimen.

7b. Source or Reference for diet:	

8. Is restraint needed beyond routine handling? _____ Yes _____ No
If yes, describe the planned restraint procedures and/or equipment.

9. Will injections, vaccinations, or blood sampling be necessary? (Check all that apply.)
_____ Yes, injections _____ Yes, vaccinations ____ Yes, blood sampling _____ No to all

If yes, answer the following:

Substance to be injected or withdrawn:	
Size of needle (gauge):	
Site of penetration:	
Method (e.g., SubQ, IM or IV) *:	

* SubQ = subcutaneously; IM = intramuscularly; IV = intravenously

10. Is individual animal identification necessary? _____ Yes _____ No
If no, can animals that might escape cages be identified, or will they need to be euthanized?

If yes, please state:

Form of tags:	
Method and location of attachment:	
Frequency of check / replacement:	
If wild animal, method of removal after project completion:	

11a. Planned Euthanasia. If the research protocol for this research project requires that any of its subjects/participants be euthanized, please state the means by which such euthanasia will be carried out, the method(s) of delivery, and the compound(s) (if appropriate) to be used. If the method of delivery is injection, please include the gauge of the needle and the site of the injection to be used.

11b. Following the planned euthanasia of the subjects/participants, how will carcasses be disposed of?

12a. Emergency Euthanasia. In the event that this research study has to be terminated early, for any reason, to include, but not to be limited to, the following: an accident, the onset of disease, or the need for emergency evacuation (e.g., due to severe weather or a natural disaster), please state the means by which such euthanasia will be carried out, the method(s) of delivery, and the compound(s) (if appropriate) to be used. If the method of delivery is injection, please include the gauge of the needle and the site of the injection to be used.

12b. Following the emergency euthanasia of the subjects/participants, how will carcasses be disposed of?

13. Other. Describe, and justify, all other planned procedures that may cause pain or distress to animal subjects, such as the use of electric shocks, unusual housing, etc.

14. Disposition of animals. After the project is completed, what will be done with any surviving animals?

APPLICATION FOR USE OF VERTEBRATE ANIMALS IN RESEARCH OR TEACHING

Appendix D: Protocols Involving Surgery

1. Name and location of surgical procedure (Room, Building or Farm):

Procedure	Site

2. For each anesthetic to be used, list the following:

Compound Used	Dosage (Range)	Route of administration (if by injection include the gauge of the needle and site of injection)

3a. Is the surgery expected to be terminal? _____ Yes _____No

3b. If recovery is involved, provide the location of the recovery (Room, Building or Farm):

3c. Describe any analgesics to be used, the doses and frequency of application, and the routes of administration (if by injection, include the gauge of the needle and the site/target of the injection). If none, explain.

3d. Describe any antibiotics to be used, the doses and frequency of application, and the routes of administration (if by injection, include the gauge of the needle and the site/target of the injection). If none, explain.

4. Will any of the animals have more than one surgical procedure performed? _____Yes _____No
If yes, why?

5. Provide a rationale for the animal model selected and its appropriateness of use.

6. Policy 12 guidelines. If painful procedures are involved, please complete the following section. NOTE: USDA defines "a painful procedure" as "any procedure that would reasonably be expected to cause more than slight or momentary pain or distress in a human being to which that procedure is applied, i.e., pain, in excess of that caused by injections or other minor procedures." (A painful procedure in which pain is relieved is still considered to be a painful procedure. All surgery, including non-survival surgery, performed under anesthesia is considered to be a painful procedure.)

Provide assurance that alternatives to painful procedures have been considered. Information must be provided as to sources consulted, e.g., biological abstracts, Index Medicus, the Current Research Information Service (CRIS), or the Animal Welfare Information Center operated by the National Agricultural Library.

Please indicate literature search used:	
Keywords and relevant citations:	

Indicate any other sources consulted (i.e., specific literature citations, recent meetings attended).

7. All procedures that may cause more than momentary, or slight, pain or distress to the animal(s) must be performed with appropriate sedatives, analgesics or anesthetics unless withholding such agents is justified for scientific reasons, and will be allowed to persist for the shortest duration of time which is necessary for the research protocol.. If the research protocol for any procedure necessitates the withholding of pain-relieving agents, provide justification.

By signing below I assure that discomfort and injury to animals will be limited to that which is unavoidable in the conduct of scientifically valuable research, and that appropriate anesthetic, analgesic and/or tranquilizing drugs will be used to relieve all unnecessary pain and distress for the subject animals during teaching, research, testing, and/or post-operative care.

Name of Principal Investigator (typed) _____

Signature of Principal Investigator: _____ Date: _____